

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-12 (Cancelled).

13. (New) A method of obtaining a relatively consistent scattered light measurement, comprising:

directing a light beam through an accommodation vessel toward a detection unit to produce a scattered component and a transmitted component of the light beam;

passing the transmitted component and the scattered component of the light beam through a first lens system;

allowing the scattered component of the light beam to pass around a diaphragm upon which the transmitted component of the light beam impinges;

measuring the intensity of the transmitted component of the light beam impinging upon the diaphragm with a detector mounted on the diaphragm;

passing the scattered component of the light beam through a second lens system; and

measuring the intensity of the scattered component of the light beam separately from the transmitted component.

14. (New) The method of claim 13, further comprising separating the transmitted component of the light beam from the scattered component of the optical beam with a shaped diaphragm.

15. (New) The method of claim 14, wherein the diaphragm includes a region for mounting a detector.

16. (New) The method of claim 14, wherein the diaphragm includes a region for mounting a beam guidance or deflection unit.

17. (New) The method of claim 13, further including separating the transmitted component of the light beam from the scattered component of the light beam by a mirror placed in a path of the light beam, a beam guidance or deflection unit mounted on a mounting region of the mirror.

18. (New) The method of claim 13, further comprising separating the transmitted component of the light beam from the scattered component of the light beam by a machined lens placed in a path of the light beam, a beam guidance or deflection unit mounted on a mounting region of the lens.

19. (New) The method of claim 13, wherein the step of measuring the intensity of the transmitted component of the light beam includes measuring the intensity with a detector having wavelength-selective components.

20. (New) The method of claim 13, wherein signals of both the scattered and transmitted components of the light beam are measured temporally both separately and simultaneously.

21. (New) The method of claim 13, wherein an intensity of a light source is readjusted by the light directly transmitted from the light source.

22. (New) The method of claim 13, further including recording a signal of the transmitted component of the light beam as it passes through a vessel for accommodating a material to be measured as a function of a position of the vessel.

23. (New) The method of claim 22 wherein the vessel is a cuvette.

24. (New) The method of claim 13, further including setting, testing, and if appropriate, correction of the position of a vessel for accommodating a material to be measured, wherein the setting, testing, and correction includes moving the vessel through the light beam; scanning the vessel during its movement through the light beam; and recording a signal of the transmitted component of the light beam as a

function of the vessel in order to define the position of the vessel relative to the light beam.

25. (New) The method of claim 24 wherein the vessel is a cuvette.

26. (New) The method of claim 13, wherein the method is used for in-process control for the purpose of validation in automatic diagnostic analyzers.

27. (New) The method of claim 13, wherein the method is used in analysis processes.

28. (New) The method of claim 13, wherein the method is used in in-vitro diagnosis processes.

29. (New) A method of calibrating a system for measuring a specimen using light, comprising:

directing a measuring light beam toward a detection unit;

passing an empty vessel for accommodating a material to be measured through the path of the measuring light beam;

separating a transmitted component of the measuring light beam from a scattered component of the measuring light beam;

measuring the intensity of a transmitted component of the light beam; and

measuring the intensity of a scattered component of the light beam separately from the transmitted component.

30. (New) The method of claim 29, wherein the method is used in analysis processes.

31. (New) The method of claim 29, wherein the method is used in in-vitro diagnosis processes.

32. (New) A method of measuring a specimen using light, comprising:
calibrating a measuring system by:

directing a measuring light beam toward a detection unit;

passing an empty vessel for accommodating a material to be measured through the path of the measuring light beam;

separating a transmitted component of the measuring light beam from a scattered component of the measuring light beam;

measuring the intensity of a transmitted component of the light beam; and

measuring the intensity of a scattered component of the light beam separately from the transmitted component;

filling the empty vessel with the specimen to be measured;

placing the vessel containing the specimen to be measured in the path of the measuring light beam;

measuring the intensity of a transmitted component of the light beam; and
measuring the intensity of a scattered component of the light beam separately
from the transmitted component.

33. (New) The method of claim 32, wherein the method is used in analysis
processes.

34. (New) The method of claim 32, wherein the method is used in in-vitro
diagnosis processes.